

212583.ST25
SEQUENCE LISTING

<110> Nickoloff, Brian
Miele, Lucio

<120> METHOD AND REAGENTS FOR EPITHELIAL BARRIER FORMATION AND TREATMENT
OF MALIGNANT AND BENIGN SKIN DISORDERS BY MODULATING THE NOTCH PATHWAY

<130> 212583

<140> Unassigned

<141> 2001-08-31

<150> US 60/229,614

<151> 2000-08-31

<160> 18

<170> PatentIn version 3.1

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Gln	Asp	Val	Asn	Glu	Cys	Gly	Gln	Lys	Pro	Arg	Leu	Cys	Arg	His	Gly	
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ala	cys	gln	asn	gly	gly	thr	cys	his	asn	thr	his	gly	gly	tyr	asn	
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cys	val	cys	val	asn	gly	trp	thr	gly	glu	asp	cys	ser	glu	asn	ile	
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asp	asp	cys	ala	ser	ala	ala	cys	phe	his	gly	ala	thr	cys	his	asp	
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arg	val	ala	ser	phe	tyr	cys	glu	cys	pro	his	gly	arg	thr	gly	leu	
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pro	ser	gly	tyr	thr	gly	pro	ala	cys	ser	gln	asp	val	asp	glu	cys	
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Figure 1. Schematic representation of the experimental design. The subjects were divided into two groups: the control group (CG) and the experimental group (EG). The CG was divided into two subgroups: the control group (CG) and the control group (CG). The EG was divided into two subgroups: the experimental group (EG) and the experimental group (EG). The subjects were divided into two groups: the control group (CG) and the experimental group (EG). The CG was divided into two subgroups: the control group (CG) and the control group (CG). The EG was divided into two subgroups: the experimental group (EG) and the experimental group (EG).

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ctg Leu	gac Asp 1430	tac Tyr	agc Ser	ttc Phe	ggg Gly	ggg Gly 1435	ggg Gly	gcc Ala	ggg Gly	cgc Arg	gac Asp 1440	atc Ile	ccc Pro	ccg Pro	4329		
ccg Pro	ctg Leu 1445	atc Ile	gag Glu	gag Glu	gcg Ala	tgc Cys 1450	gag Glu	ctg Leu	ccc Pro	gag Glu	tgc Cys 1455	cag Gln	gag Glu	gac Asp	4374		
gcg Ala	ggc Gly 1460	aac Asn	aag Lys	gtc Val	tgc Cys	agc Ser 1465	ctg Leu	cag Gln	tgc Cys	aac Asn	aac Asn 1470	cac His	gcg Ala	tgc Cys	4419		
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ggc Gly	gag Ala 1790	gac Asp	tcc Ser	gtg Val	ggc Gly	ctc Leu 1795	aag Lys	ccc Pro	ctg Leu	aag Lys	aac Asn 1800	gct Ala	tca Ser	gac Asp	5409
ggt Gly	gcc Ala 1805	ctc Leu	atg Met	gac Asp	gac Asp	aac Asn 1810	cag Gln	aat Asn	gag Glu	tgg Trp	ggg Gly 1815	gac Asp	gag Glu	gac Asp	5454
ctg Leu	gag Glu 1820	acc Thr	aag Lys	aag Lys	ttc Phe	cgg Arg 1825	ttc Phe	gag Glu	gag Glu	ccc Pro	gtg Val 1830	ggt Val	ctg Leu	cct Pro	5499
gac Asp	ctg Leu 1835	gac Asp	gac Asp	cag Gln	aca Thr	gac Asp 1840	cac His	cgg Arg	cag Gln	tgg Trp	act Thr 1845	cag Gln	cag Gln	cac His	5544
ctg Leu	gat Asp 1850	gcc Ala	gct Ala	gac Asp	ctg Leu	cgc Arg 1855	atg Met	tct Ser	gcc Ala	atg Met	gcc Ala 1860	ccc Pro	aca Thr	ccg Pro	5589
ccc Pro	cag Gln 1865	ggt Gly	gag Glu	ggt Val	gac Asp	gcc Ala 1870	gac Asp	tgc Cys	atg Met	gac Asp	gtc Val 1875	aat Asn	gtc Val	cgc Arg	5634
ggg Gly	cct Pro 1880	gat Asp	ggc Gly	ttc Phe	acc Thr	ccg Pro 1885	ctc Leu	atg Met	atc Ile	gcc Ala	tcc Ser 1890	tgc Cys	agc Ser	ggg Gly	5679
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tac Tyr	tca Ser 1940	cgc Arg	tct Ser	gat Asp	gcc Ala	gcc Ala 1945	aag Lys	cgc Arg	ctg Leu	ctg Leu	gag Glu 1950	gcc Ala	agc Ser	gca Ala	5859
gat Asp	gcc Ala 1955	aac Asn	atc Ile	cag Gln	gac Asp	aac Asn 1960	atg Met	ggc Gly	cgc Arg	acc Thr	ccg Pro 1965	ctg Leu	cat His	gcg Ala	5904
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cca Pro	ctg Leu 2000	atc Ile	ctg Leu	gct Ala	gcc Ala	cgc Arg 2005	ctg Leu	gcc Ala	gtg Val	gag Glu	ggc Gly 2010	atg Met	ctg Leu	gag Glu	6039
gac Asp	ctc Leu 2015	atc Ile	aac Asn	tca Ser	cac His	gcc Ala 2020	gac Asp	gtc Val	aac Asn	gcc Ala	gta Val 2025	gat Asp	gac Asp	ctg Leu	6084
ggc Gly	aag Lys 2030	tcc Ser	gcc Ala	ctg Leu	cac His	tgg Trp 2035	gcc Ala	gcc Ala	gcc Ala	gtg Val	aac Asn 2040	aat Asn	gtg Val	gat Asp	6129

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gcc Ala	gca Ala 2045	gtt Val	gtg Val	ctc Leu	ctg Leu	aag Lys 2050	aac Asn	ggg Gly	gct Ala	aac Asn	aaa Lys 2055	gat Asp	atg Met	cag Gln	6174
aac Asn	aac Asn 2060	agg Arg	gag Glu	gag Glu	aca Thr	ccc Pro 2065	ctg Leu	ttt Phe	ctg Leu	gcc Ala	gcc Ala 2070	cgg Arg	gag Glu	ggc Gly	6219
agc Ser	tac Tyr 2075	gag Glu	acc Thr	gcc Ala	aag Lys	gtg Val 2080	ctg Leu	ctg Leu	gac Asp	cac His	ttt Phe 2085	gcc Ala	aac Asn	cgg Arg	6264
gac Asp	atc Ile 2090	acg Thr	gat Asp	cat His	atg Met	gac Asp 2095	cgc Arg	ctg Leu	ccg Pro	cgc Arg	gac Asp 2100	atc Ile	gca Ala	cag Gln	6309
gag Glu	cgc Arg 2105	atg Met	cat His	cac His	gac Asp	atc Ile 2110	gtg Val	agg Arg	ctg Leu	ctg Leu	gac Asp 2115	gag Glu	tac Tyr	aac Asn	6354
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ccc Pro	acc Thr 2135	ctg Leu	tcg Ser	ccc Pro	ccg Pro	ctc Leu 2140	tgc Cys	tcg Ser	ccc Pro	aac Asn	ggc Gly 2145	tac Tyr	ctg Leu	ggc Gly	6444
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gca Ala	cgg Arg 2180	agg Arg	aag Lys	aag Lys	tcc Ser	cag Gln 2185	gay Asp	ggc Gly	aag Lys	ggc Gly	tgc Cys 2190	ctg Leu	ctg Leu	gac Asp	6579
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ttc Phe	cag Gln 2225	cag Gln	tct Ser	ccg Pro	tcc Ser	gtg Val 2230	ccc Pro	ctc Leu	aac Asn	cac His	ctg Leu 2235	cct Pro	ggg Gly	atg Met	6714
ccc Pro	gac Asp 2240	acc Thr	cac His	ctg Leu	ggc Gly	atc Ile 2245	ggg Gly	cac His	ctg Leu	aac Asn	gtg Val 2250	gcg Ala	gcc Ala	aag Lys	6759
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act Thr	ggc Gly 2270	cca Pro	cct Pro	cgt Arg	ctc Leu	tcc Ser 2275	cac His	ctg Leu	cct Pro	gtg Val	gcc Ala 2280	tct Ser	ggc Gly	acc Thr	6849
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Val	Gly	Gly	Ser	Thr	Ser	Leu	Asn	Gly	Gln	Cys	Glu	Trp	Leu	Ser	6939
2300						2305					2310				
cgg	ctg	cag	agc	ggc	atg	gtg	ccg	aac	caa	tac	aac	cct	ctg	cgg	6984
Arg	Leu	Gln	Ser	Gly	Met	Val	Pro	Asn	Gln	Tyr	Asn	Pro	Leu	Arg	
2315						2320					2325				
ggg	agt	gtg	gca	cca	ggc	ccc	ctg	agc	aca	cag	gcc	ccc	tcc	ctg	7029
Gly	Ser	Val	Ala	Pro	Gly	Pro	Leu	Ser	Thr	Gln	Ala	Pro	Ser	Leu	
2330						2335					2340				
cag	cat	ggc	atg	gta	ggc	ccg	ctg	cac	agt	agc	ctt	gct	gcc	agc	7074
Gln	His	Gly	Met	Val	Gly	Pro	Leu	His	Ser	Ser	Leu	Ala	Ala	Ser	
2345						2350					2355				
gcc	ctg	tcc	cag	atg	atg	agc	tac	cag	ggc	ctg	ccc	agc	acc	cgg	7119
Ala	Leu	Ser	Gln	Met	Met	Ser	Tyr	Gln	Gly	Leu	Pro	Ser	Thr	Arg	
2360						2365					2370				
ctg	gcc	acc	cag	cct	cac	ctg	gtg	cag	acc	cag	cag	gtg	cag	cca	7164
Leu	Ala	Thr	Gln	Pro	His	Leu	Val	Gln	Thr	Gln	Gln	Val	Gln	Pro	
2375						2380					2385				
caa	aac	tta	cag	atg	cag	cag	cag	aac	ctg	cag	cca	gca	aac	atc	7209
Gln	Asn	Leu	Gln	Met	Gln	Gln	Gln	Asn	Leu	Gln	Pro	Ala	Asn	Ile	
2390						2395					2400				
cag	cag	cag	caa	agc	ctg	cag	ccg	cca	cca	cca	cca	cca	cag	ccg	7254
Gln	Gln	Gln	Gln	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Pro	Pro	Gln	Pro	
2405						2410					2415				
cac	ctt	ggc	gtg	agc	tca	gca	gcc	agc	ggc	cac	ctg	ggc	cgg	agc	7299
His	Leu	Gly	Val	Ser	Ser	Ala	Ala	Ser	Gly	His	Leu	Gly	Arg	Ser	
2420						2425					2430				
ttc	ctg	agt	gga	gag	ccg	agc	cag	gca	gac	gtg					7332
Phe	Leu	Ser	Gly	Glu	Pro	Ser	Gln	Ala	Asp	Val					
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<211> 2444

<212> PRT

<213> Artificial Sequence

<220>

<221> misc_feature

<222> (891)..(891)

<223> The 'Xaa' at location 891 stands for Gly, or Ala.

<220>

<221> misc_feature

<222> (1763)..(1763)

<223> The 'Xaa' at location 1763 stands for Gln, Arg, Pro, or Leu.

<220>

<221> misc_feature

<222> (1787)..(1787)

<223> The 'Xaa' at location 1787 stands for Thr, Ala, Pro, or Ser.

<220>

<223> Constitutively Active Notch-1

<400> 2

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35 40 45Gly Gly Ala Phe Val Gly Pro Arg Cys Gln Asp Pro Asn Pro Cys Leu
50 55 60Ser Thr Pro Cys Lys Asn Ala Gly Thr Cys His Val Val Asp Arg Arg
65 70 75 80Gly Val Ala Asp Tyr Ala Cys Ser Cys Ala Leu Gly Phe Ser Gly Pro
85 90 95Leu Cys Leu Thr Pro Leu Asp Asn Ala Cys Leu Thr Asn Pro Cys Arg
100 105 110Asn Gly Gly Thr Cys Asp Leu Leu Thr Leu Thr Glu Tyr Lys Cys Arg
115 120 125Cys Pro Pro Gly Trp Ser Gly Lys Ser Cys Gln Gln Ala Asp Pro Cys
130 135 140Ala Ser Asn Pro Cys Ala Asn Gly Gly Gln Cys Leu Pro Phe Glu Ala
145 150 155 160Ser Tyr Ile Cys His Cys Pro Pro Ser Phe His Gly Pro Thr Cys Arg
165 170 175Gln Asp Val Asn Glu Cys Gly Gln Lys Pro Arg Leu Cys Arg His Gly
180 185 190Gly Thr Cys His Asn Glu Val Gly Ser Tyr Arg Cys Val Cys Arg Ala
195 200 205Thr His Thr Gly Pro Asn Cys Glu Arg Pro Tyr Val Pro Cys Ser Pro
210 215 220

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Ser Pro Cys Gln Asn Gly Gly Thr Cys Arg Pro Thr Gly Asp Val Thr
 225 230 235 240
 His Glu Cys Ala Cys Leu Pro Gly Phe Thr Gly Gln Asn Cys Glu Glu
 245 250 255
 Asn Ile Asp Asp Cys Pro Gly Asn Asn Cys Lys Asn Gly Gly Ala Cys
 260 265 270
 Val Asp Gly Val Asn Thr Tyr Asn Cys Pro Cys Pro Pro Glu Trp Thr
 275 280 285
 Gly Gln Tyr Cys Thr Glu Asp Val Asp Glu Cys Gln Leu Met Pro Asn
 290 295 300
 Ala Cys Gln Asn Gly Gly Thr Cys His Asn Thr His Gly Gly Tyr Asn
 305 310 315 320
 Cys Val Cys Val Asn Gly Trp Thr Gly Glu Asp Cys Ser Glu Asn Ile
 325 330 335
 Asp Asp Cys Ala Ser Ala Ala Cys Phe His Gly Ala Thr Cys His Asp
 340 345 350
 Arg Val Ala Ser Phe Tyr Cys Glu Cys Pro His Gly Arg Thr Gly Leu
 355 360 365
 Leu Cys His Leu Asn Asp Ala Cys Ile Ser Asn Pro Cys Asn Glu Gly
 370 375 380
 Ser Asn Cys Asp Thr Asn Pro Val Asn Gly Lys Ala Ile Cys Thr Cys
 385 390 395 400
 Pro Ser Gly Tyr Thr Gly Pro Ala Cys Ser Gln Asp Val Asp Glu Cys
 405 410 415
 Ser Leu Gly Ala Asn Pro Cys Glu His Ala Gly Lys Cys Ile Asn Thr
 420 425 430
 Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln Gly Tyr Thr Gly Pro Arg
 435 440 445
 Cys Glu Ile Asp Val Asn Glu Cys Val Ser Asn Pro Cys Gln Asn Asp
 450 455 460
 Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe Gln Cys Met Cys Met Pro
 465 470 475 480
 Gly Tyr Glu Gly Val His Cys Glu Val Asn Thr Asp Glu Cys Ala Ser
 485 490 495

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Ser Pro Cys Leu His Asn Gly Arg Cys Leu Asp Lys Ile Asn Glu Phe
 500 505 510
 Gln Cys Glu Cys Pro Thr Gly Phe Thr Gly His Leu Cys Gln Tyr Asp
 515 520 525
 Val Asp Glu Cys Ala Ser Thr Pro Cys Lys Asn Gly Ala Lys Cys Leu
 530 535 540
 Asp Gly Pro Asn Thr Tyr Thr Cys Val Cys Thr Glu Gly Tyr Thr Gly
 545 550 555 560
 Thr His Cys Glu Val Asp Ile Asp Glu Cys Asp Pro Asp Pro Cys His
 565 570 575
 Tyr Gly Ser Cys Lys Asp Gly Val Ala Thr Phe Thr Cys Leu Cys Arg
 580 585 590
 Pro Gly Tyr Thr Gly His His Cys Glu Thr Asn Ile Asn Glu Cys Ser
 595 600 605
 Ser Gln Pro Cys Arg Leu Arg Gly Thr Cys Gln Asp Pro Asp Asn Ala
 610 615 620
 Tyr Leu Cys Phe Cys Leu Lys Gly Thr Thr Gly Pro Asn Cys Glu Ile
 625 630 635 640
 Asn Leu Asp Asp Cys Ala Ser Ser Pro Cys Asp Ser Gly Thr Cys Leu
 645 650 655
 Asp Lys Ile Asp Gly Tyr Glu Cys Ala Cys Glu Pro Gly Tyr Thr Gly
 660 665 670
 Ser Met Cys Asn Ser Asn Ile Asp Glu Cys Ala Gly Asn Pro Cys His
 675 680 685
 Asn Gly Gly Thr Cys Glu Asp Gly Ile Asn Gly Phe Thr Cys Arg Cys
 690 695 700
 Pro Glu Gly Tyr His Asp Pro Thr Cys Leu Ser Glu Val Asn Glu Cys
 705 710 715 720
 Asn Ser Asn Pro Cys Val His Gly Ala Cys Arg Asp Ser Leu Asn Gly
 725 730 735
 Tyr Lys Cys Asp Cys Asp Pro Gly Trp Ser Gly Thr Asn Cys Asp Ile
 740 745 750
 Asn Asn Asn Glu Cys Glu Ser Asn Pro Cys Val Asn Gly Gly Thr Cys
 755 760 765

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Lys Asp Met Thr Ser Gly Ile Val Cys Thr Cys Arg Glu Gly Phe Ser
 770 775 780
 Gly Pro Asn Cys Gln Thr Asn Ile Asn Glu Cys Ala Ser Asn Pro Cys
 785 790 795
 Leu Asn Lys Gly Thr Cys Ile Asp Asp Val Ala Gly Tyr Lys Cys Asn
 805 810 815
 Cys Leu Leu Pro Tyr Thr Gly Ala Thr Cys Glu Val Val Leu Ala Pro
 820 825
 Cys Ala Pro Ser Pro Cys Arg Asn Gly Gly Glu Cys Arg Gln Ser Glu
 835 840 845
 Asp Tyr Glu Ser Phe Ser Cys Val Cys Pro Thr Ala Gly Ala Lys Gly
 850 855 860
 Gln Thr Cys Glu Val Asp Ile Asn Glu Cys Val Leu Ser Pro Cys Arg
 865 870 875
 His Gly Ala Ser Cys Gln Asn Thr His Gly Xaa Tyr Arg Cys His Cys
 885 890 895
 Gln Ala Gly Tyr Ser Gly Arg Asn Cys Glu Thr Asp Ile Asp Asp Cys
 900 905 910
 Arg Pro Asn Pro Cys His Asn Gly Gly Ser Cys Thr Asp Gly Ile Asn
 915 920 925
 Thr Ala Phe Cys Asp Cys Leu Pro Gly Phe Arg Gly Thr Phe Cys Glu
 930 935 940
 Glu Asp Ile Asn Glu Cys Ala Ser Asp Pro Cys Arg Asn Gly Ala Asn
 945 950 955 960
 Cys Thr Asp Cys Val Asp Ser Tyr Thr Cys Thr Cys Pro Ala Gly Phe
 965 970 975
 Ser Gly Ile His Cys Glu Asn Asn Thr Pro Asp Cys Thr Glu Ser Ser
 980 985 990
 Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser Phe Thr Cys
 995 1000 1005
 Leu Cys Pro Pro Gly Phe Thr Gly Ser Tyr Cys Gln His Val Val
 1010 1015 1020
 Asn Glu Cys Asp Ser Arg Pro Cys Leu Leu Gly Gly Thr Cys Gln
 1025 1030 1035

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Asp Gly 1040	Arg Gly Leu His 1045	Arg Cys Thr Cys Pro 1050	Gln Gly Tyr Thr
Gly Pro 1055	Asn Cys Gln Asn 1060	Val His Trp Cys 1065	Asp Ser Ser Pro
Cys Lys 1070	Asn Gly Gly Lys 1075	Trp Gln Thr His 1080	Gln Tyr Arg
Cys Glu 1085	Cys Pro Ser Gly 1090	Thr Gly Leu Tyr 1095	Asp Val Pro
Ser Val 1100	Ser Cys Glu Val 1105	Ala Gln Arg Gln 1110	Gly Val Asp Val
Ala Arg 1115	Leu Cys Gln His 1120	Gly Gly Leu Cys Val 1125	Ala Gly Asn
Thr His 1130	His Cys Arg Cys 1135	Ala Gly Tyr Thr 1140	Gly Ser Tyr Cys
Glu Asp 1145	Leu Val Asp Glu 1150	Cys Ser Pro Ser Pro 1155	Gln Asn Gly
Ala Thr 1160	Cys Thr Asp Tyr 1165	Gly Gly Tyr Ser 1170	Lys Cys Val
Ala Gly 1175	Tyr His Gly Val 1180	Cys Ser Glu Glu 1185	Ile Asp Glu Cys
Leu Ser 1190	His Pro Cys Gln 1195	Gly Gly Thr Cys 1200	Asp Leu Pro
Asn Thr 1205	Tyr Lys Cys Ser 1210	Pro Arg Gly Thr 1215	Gln Gly Val His
Cys Glu 1220	Ile Asn Val Asp 1225	Cys Asn Pro Pro 1230	Val Asp Pro Val
Ser Arg 1235	Ser Pro Lys Cys 1240	Phe Asn Asn Gly Thr 1245	Cys Val Asp Gln
Val Gly 1250	Gly Tyr Ser Cys 1255	Cys Pro Pro Gly 1260	Phe Val Gly Glu
Arg Cys 1265	Glu Gly Asp Val 1270	Glu Cys Leu Ser 1275	Asn Pro Cys Asp
Ala Arg 1280	Gly Thr Gln Asn 1285	Val Gln Arg Val 1290	Asn Asp Phe His

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Cys Glu Cys Arg Ala Gly His Thr Gly Arg Arg Cys Glu Ser Val
 1295 1300 1305
 Ile Asn Gly Cys Lys Gly Lys Pro Cys Lys Asn Gly Gly Thr Cys
 1310 1315 1320
 Ala Val Ala Ser Asn Thr Ala Arg Gly Phe Ile Cys Lys Cys Pro
 1325 1330 1335
 Ala Gly Phe Glu Gly Ala Thr Cys Glu Asn Asp Ala Arg Thr Cys
 1340 1345 1350
 Gly Ser Leu Arg Cys Leu Asn Gly Gly Thr Cys Ile Ser Gly Pro
 1355 1360 1365
 Arg Ser Pro Thr Cys Leu Cys Leu Gly Pro Phe Thr Gly Pro Glu
 1370 1375 1380
 Cys Gln Phe Pro Ala Ser Ser Pro Cys Leu Gly Gly Asn Pro Cys
 1385 1390 1395
 Tyr Asn Gln Gly Thr Cys Glu Pro Thr Ser Glu Ser Pro Phe Tyr
 1400 1405 1410
 Arg Cys Leu Cys Pro Ala Lys Phe Asn Gly Leu Leu Cys His Ile
 1415 1420 1425
 Leu Asp Tyr Ser Phe Gly Gly Gly Ala Gly Arg Asp Ile Pro Pro
 1430 1435 1440
 Pro Leu Ile Glu Glu Ala Cys Glu Leu Pro Glu Cys Gln Glu Asp
 1445 1450 1455
 Ala Gly Asn Lys Val Cys Ser Leu Gln Cys Asn Asn His Ala Cys
 1460 1465 1470
 Gly Trp Asp Gly Gly Asp Cys Ser Leu Asn Phe Asn Asp Pro Trp
 1475 1480 1485
 Lys Asn Cys Thr Gln Ser Leu Gln Cys Trp Lys Tyr Phe Ser Asp
 1490 1495 1500
 Gly His Cys Asp Ser Gln Cys Asn Ser Ala Gly Cys Leu Phe Asp
 1505 1510 1515
 Gly Phe Asp Cys Gln Arg Ala Glu Gly Gln Cys Asn Pro Leu Tyr
 1520 1525 1530
 Asp Gln Tyr Cys Lys Asp His Phe Ser Asp Gly His Cys Asp Gln
 1535 1540 1545

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Gly Cys Asn Ser Ala Glu Cys Glu Trp Asp Gly Leu Asp Cys Ala
 1550 1555 1560
 Glu His Val Pro Glu Arg Leu Ala Ala Gly Thr Leu Val Val Val
 1565 1570 1575
 Val Leu Met Pro Pro Glu Gln Leu Arg Asn Ser Ser Phe His Phe
 1580 1585 1590
 Leu Arg Glu Leu Ser Arg Val Leu His Thr Asn Val Val Phe Lys
 1595 1600 1605
 Arg Asp Ala His Gly Gln Gln Met Ile Phe Pro Tyr Tyr Gly Arg
 1610 1615 1620
 Glu Glu Glu Leu Arg Lys His Pro Ile Lys Arg Ala Ala Glu Gly
 1625 1630 1635
 Trp Ala Ala Pro Asp Ala Leu Leu Gly Gln Val Lys Ala Ser Leu
 1640 1645 1650
 Leu Pro Gly Gly Ser Glu Gly Gly Arg Arg Arg Arg Glu Leu Asp
 1655 1660 1665
 Pro Met Asp Val Arg Gly Ser Ile Val Tyr Leu Glu Ile Asp Asn
 1670 1675 1680
 Arg Gln Cys Val Gln Ala Ser Ser Gln Cys Phe Gln Ser Ala Thr
 1685 1690 1695
 Asp Val Ala Ala Phe Leu Gly Ala Leu Ala Ser Leu Gly Ser Leu
 1700 1705 1710
 Asn Ile Pro Tyr Lys Ile Glu Ala Val Gln Ser Glu Thr Val Glu
 1715 1720 1725
 Pro Pro Pro Pro Ala Gln Leu His Phe Met Tyr Val Ala Ala Ala
 1730 1735 1740
 Ala Phe Val Leu Leu Phe Phe Val Gly Cys Gly Val Leu Leu Ser
 1745 1750 1755
 Arg Lys Arg Arg Xaa Gln His Gly Gln Leu Trp Phe Pro Glu Gly
 1760 1765 1770
 Phe Lys Val Ser Glu Ala Ser Lys Lys Lys Arg Arg Glu Xaa Leu
 1775 1780 1785
 Gly Glu Asp Ser Val Gly Leu Lys Pro Leu Lys Asn Ala Ser Asp
 1790 1795 1800

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Gly	Ala	Leu	Met	Asp	Asp	Asn	Gln	Asn	Glu	Trp	Gly	Asp	Glu	Asp
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Leu	Glu	Thr	Lys	Lys	Phe	Arg	Phe	Glu	Glu	Pro	Val	Val	Leu	Pro
1820						1825					1830			
Asp	Leu	Asp	Asp	Gln	Thr	Asp	His	Arg	Gln	Trp	Thr	Gln	Gln	His
1835						1840					1845			
Leu	Asp	Ala	Ala	Asp	Leu	Arg	Met	Ser	Ala	Met	Ala	Pro	Thr	Pro
1850						1855					1860			
Pro	Gln	Gly	Glu	Val	Asp	Ala	Asp	Cys	Met	Asp	Val	Asn	Val	Arg
1865						1870					1875			
Gly	Pro	Asp	Gly	Phe	Thr	Pro	Leu	Met	Ile	Ala	Ser	Cys	Ser	Gly
1880						1885					1890			
Gly	Gly	Leu	Glu	Thr	Gly	Asn	Ser	Glu	Glu	Glu	Glu	Asp	Ala	Pro
1895						1900					1905			
Ala	Val	Ile	Ser	Asp	Phe	Ile	Tyr	Gln	Gly	Ala	Ser	Leu	His	Asn
1910						1915					1920			
Gln	Thr	Asp	Arg	Thr	Gly	Glu	Thr	Ala	Leu	His	Leu	Ala	Ala	Arg
1925						1930					1935			
Tyr	Ser	Arg	Ser	Asp	Ala	Ala	Lys	Arg	Leu	Leu	Glu	Ala	Ser	Ala
1940						1945					1950			
Asp	Ala	Asn	Ile	Gln	Asp	Asn	Met	Gly	Arg	Thr	Pro	Leu	His	Ala
1955						1960					1965			
Ala	Val	Ser	Ala	Asp	Ala	Gln	Gly	Val	Phe	Gln	Ile	Leu	Ile	Arg
1970						1975					1980			
Asn	Arg	Ala	Thr	Asp	Leu	Asp	Ala	Arg	Met	His	Asp	Gly	Thr	Thr
1985						1990					1995			
Pro	Leu	Ile	Leu	Ala	Ala	Arg	Leu	Ala	Val	Glu	Gly	Met	Leu	Glu
2000						2005					2010			
Asp	Leu	Ile	Asn	Ser	His	Ala	Asp	Val	Asn	Ala	Val	Asp	Asp	Leu
2015						2020					2025			
Gly	Lys	Ser	Ala	Leu	His	Trp	Ala	Ala	Ala	Val	Asn	Asn	Val	Asp
2030						2035					2040			
Ala	Ala	Val	Val	Leu	Leu	Lys	Asn	Gly	Ala	Asn	Lys	Asp	Met	Gln
2045						2050					2055			

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Asn	Asn	Arg	Glu	Glu	Thr	Pro	Leu	Phe	Leu	Ala	Ala	Arg	Glu	Gly
2060						2065					2070			
Ser	Tyr	Glu	Thr	Ala	Lys	Val	Leu	Leu	Asp	His	Phe	Ala	Asn	Arg
2075						2080					2085			
Asp	Ile	Thr	Asp	His	Met	Asp	Arg	Leu	Pro	Arg	Asp	Ile	Ala	Gln
2090						2095					2100			
Glu	Arg	Met	His	His	Asp	Ile	Val	Arg	Leu	Leu	Asp	Glu	Tyr	Asn
2105						2110					2115			
Leu	Val	Arg	Ser	Pro	Gln	Leu	His	Gly	Ala	Pro	Leu	Gly	Gly	Thr
2120						2125					2130			
Pro	Thr	Leu	Ser	Pro	Pro	Leu	Cys	Ser	Pro	Asn	Gly	Tyr	Leu	Gly
2135						2140					2145			
Ser	Leu	Lys	Pro	Gly	Val	Gln	Gly	Lys	Lys	Val	Arg	Lys	Pro	Ser
2150						2155					2160			
Ser	Lys	Gly	Leu	Ala	Cys	Gly	Ser	Lys	Glu	Ala	Lys	Asp	Leu	Lys
2165						2170					2175			
Ala	Arg	Arg	Lys	Lys	Ser	Gln	Asp	Gly	Lys	Gly	Cys	Leu	Leu	Asp
2180						2185					2190			
Ser	Ser	Gly	Met	Leu	Ser	Pro	Val	Asp	Ser	Leu	Glu	Ser	Pro	His
2195						2200					2205			
Gly	Tyr	Leu	Ser	Asp	Val	Ala	Ser	Pro	Pro	Leu	Leu	Pro	Ser	Pro
2210						2215					2220			
Phe	Gln	Gln	Ser	Pro	Ser	Val	Pro	Leu	Asn	His	Leu	Pro	Gly	Met
2225						2230					2235			
Pro	Asp	Thr	His	Leu	Gly	Ile	Gly	His	Leu	Asn	Val	Ala	Ala	Lys
2240						2245					2250			
Pro	Glu	Met	Ala	Ala	Leu	Gly	Gly	Gly	Gly	Arg	Leu	Ala	Phe	Glu
2255						2260					2265			
Thr	Gly	Pro	Pro	Arg	Leu	Ser	His	Leu	Pro	Val	Ala	Ser	Gly	Thr
2270						2275					2280			
Ser	Thr	Val	Leu	Gly	Ser	Ser	Ser	Gly	Gly	Ala	Leu	Asn	Phe	Thr
2285						2290					2295			
Val	Gly	Gly	Ser	Thr	Ser	Leu	Asn	Gly	Gln	Cys	Glu	Trp	Leu	Ser
2300						2305					2310			

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Arg Leu Gln Ser Gly Met Val Pro Asn Gln Tyr Asn Pro Leu Arg
2315 2320 2325

Gly Ser Val Ala Pro Gly Pro Leu Ser Thr Gln Ala Pro Ser Leu
2330 2335 2340

Gln His Gly Met Val Gly Pro Leu His Ser Ser Leu Ala Ala Ser
2345 2350 2355

Ala Leu Ser Gln Met Met Ser Tyr Gln Gly Leu Pro Ser Thr Arg
2360 2365 2370

Leu Ala Thr Gln Pro His Leu Val Gln Thr Gln Gln Val Gln Pro
2375 2380 2385

Gln Asn Leu Gln Met Gln Gln Gln Asn Leu Gln Pro Ala Asn Ile
2390 2395 2400

Gln Gln Gln Gln Ser Leu Gln Pro Pro Pro Pro Pro Pro Gln Pro
2405 2410 2415

His Leu Gly Val Ser Ser Ala Ala Ser Gly His Leu Gly Arg Ser
2420 2425 2430

Phe Leu Ser Gly Glu Pro Ser Gln Ala Asp Val
2435 2440

<210> 3

<211> 1218

<212> PRT

<213> Homo sapiens

<400> 3

Met Arg Ser Pro Arg Thr Arg Gly Arg Ser Gly Arg Pro Leu Ser Leu
1 5 10 15

Leu Leu Ala Leu Leu Cys Ala Leu Arg Ala Lys Val Cys Gly Ala Ser
20 25 30

Gly Gln Phe Glu Leu Glu Ile Leu Ser Met Gln Asn Val Asn Gly Glu
35 40 45

Leu Gln Asn Gly Asn Cys Cys Gly Gly Ala Arg Asn Pro Gly Asp Arg
50 55 60

Lys Cys Thr Arg Asp Glu Cys Asp Thr Tyr Phe Lys Val Cys Leu Lys
65 70 75 80

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Glu Thr Ser Leu Gly Phe Glu Cys Glu Cys Ser Pro Gly Trp Thr Gly
 355 360 365
 Pro Thr Cys Ser Thr Asn Ile Asp Asp Cys Ser Pro Asn Asn Cys Ser
 370 375 380
 His Gly Gly Thr Cys Gln Asp Leu Val Asn Gly Phe Lys Cys Val Cys
 385 390 395 400
 Pro Pro Gln Trp Thr Gly Lys Thr Cys Gln Leu Asp Ala Asn Glu Cys
 405 410 415
 Glu Ala Lys Pro Cys Val Asn Ala Lys Ser Cys Lys Asn Leu Ile Ala
 420 425 430
 Ser Tyr Tyr Cys Asp Cys Leu Pro Gly Trp Met Gly Gln Asn Cys Asp
 435 440 445
 Ile Asn Ile Asn Asp Cys Leu Gly Gln Cys Gln Asn Asp Ala Ser Cys
 450 455 460
 Arg Asp Leu Val Asn Gly Tyr Arg Cys Ile Cys Pro Pro Gly Tyr Ala
 465 470 475 480
 Gly Asp His Cys Glu Arg Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys
 485 490 495
 Leu Asn Gly Gly His Cys Gln Asn Glu Ile Asn Arg Phe Gln Cys Leu
 500 505 510
 Cys Pro Thr Gly Phe Ser Gly Asn Leu Cys Gln Leu Asp Ile Asp Tyr
 515 520 525
 Cys Glu Pro Asn Pro Cys Gln Asn Gly Ala Gln Cys Tyr Asn Arg Ala
 530 535 540
 Ser Asp Tyr Phe Cys Lys Cys Pro Glu Asp Tyr Glu Gly Lys Asn Cys
 545 550 555 560
 Ser His Leu Lys Asp His Cys Arg Thr Thr Pro Cys Glu Val Ile Asp
 565 570 575
 Ser Cys Thr Val Ala Met Ala Ser Asn Asp Thr Pro Glu Gly Val Arg
 580 585 590
 Tyr Ile Ser Ser Asn Val Cys Gly Pro His Gly Lys Cys Lys Ser Gln
 595 600 605
 Ser Gly Gly Lys Phe Thr Cys Asp Cys Asn Lys Gly Phe Thr Gly Thr
 610 615 620

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Tyr Cys His Glu Asn Ile Asn Asp Cys Glu Ser Asn Pro Cys Arg Asn
625 630 635 640

Gly Gly Thr Cys Ile Asp Gly Val Asn Ser Tyr Lys Cys Ile Cys Ser
645 650 655

Asp Gly Trp Glu Gly Ala Tyr Cys Glu Thr Asn Ile Asn Asp Cys Ser
660 665 670

Gln Asn Pro Cys His Asn Gly Gly Thr Cys Arg Asp Leu Val Asn Asp
675 680 685

Phe Tyr Cys Asp Cys Lys Asn Gly Trp Lys Gly Lys Thr Cys His Ser
690 695 700

Arg Asp Ser Gln Cys Asp Glu Ala Thr Cys Asn Asn Gly Gly Thr Cys
705 710 715 720

Tyr Asp Glu Gly Asp Ala Phe Lys Cys Met Cys Pro Gly Gly Trp Glu
725 730 735

Gly Thr Thr Cys Asn Ile Ala Arg Asn Ser Ser Cys Leu Pro Asn Pro
740 745 750

Cys His Asn Gly Gly Thr Cys Val Val Asn Gly Glu Ser Phe Thr Cys
755 760 765

Val Cys Lys Glu Gly Trp Glu Gly Pro Ile Cys Ala Gln Asn Thr Asn
770 775 780

Asp Cys Ser Pro His Pro Cys Tyr Asn Ser Gly Thr Cys Val Asp Gly
785 790 795 800

Asp Asn Trp Tyr Arg Cys Glu Cys Ala Pro Gly Phe Ala Gly Pro Asp
805 810 815

Cys Arg Ile Asn Ile Asn Glu Cys Gln Ser Ser Pro Cys Ala Phe Gly
820 825 830

Ala Thr Cys Val Asp Glu Ile Asn Gly Tyr Arg Cys Val Cys Pro Pro
835 840 845

Gly His Ser Gly Ala Lys Cys Gln Glu Val Ser Gly Arg Pro Cys Ile
850 855 860

Thr Met Gly Ser Val Ile Pro Asp Gly Ala Lys Trp Asp Asp Asp Cys
865 870 875 880

Asn Thr Cys Gln Cys Leu Asn Gly Arg Ile Ala Cys Ser Lys Val Trp
885 890 895

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Cys Gly Pro Arg Pro Cys Leu Leu His Lys Gly His Ser Glu Cys Pro
 900 905 910
 Ser Gly Gln Ser Cys Ile Pro Ile Leu Asp Asp Gln Cys Phe Val His
 915 920 925
 Pro Cys Thr Gly Val Gly Glu Cys Arg Ser Ser Ser Leu Gln Pro Val
 930 935 940
 Lys Thr Lys Cys Thr Ser Asp Ser Tyr Tyr Gln Asp Asn Cys Ala Asn
 945 950 955
 Ile Thr Phe Thr Phe Asn Lys Glu Met Met Ser Pro Gly Leu Thr Thr
 965 970 975
 Glu His Ile Cys Ser Glu Leu Arg Asn Leu Asn Ile Leu Lys Asn Val
 980 985 990
 Ser Ala Glu Tyr Ser Ile Tyr Ile Ala Cys Glu Pro Ser Pro Ser Ala
 995 1000 1005
 Asn Asn Glu Ile His Val Ala Ile Ser Ala Glu Asp Ile Arg Asp
 1010 1015 1020
 Asp Gly Asn Pro Ile Lys Glu Ile Thr Asp Lys Ile Ile Asp Leu
 1025 1030 1035
 Val Ser Lys Arg Asp Gly Asn Ser Ser Leu Ile Ala Ala Val Ala
 1040 1045 1050
 Glu Val Arg Val Gln Arg Arg Pro Leu Lys Asn Arg Thr Asp Phe
 1055 1060 1065
 Leu Val Pro Leu Leu Ser Ser Val Leu Thr Val Ala Trp Ile Cys
 1070 1075 1080
 Cys Leu Val Thr Ala Phe Tyr Trp Cys Leu Arg Lys Arg Arg Lys
 1085 1090 1095
 Pro Gly Ser His Thr His Ser Ala Ser Glu Asp Asn Thr Thr Asn
 1100 1105 1110
 Asn Val Arg Glu Gln Leu Asn Gln Ile Lys Asn Pro Ile Glu Lys
 1115 1120 1125
 His Gly Ala Asn Thr Val Pro Ile Lys Asp Tyr Glu Asn Lys Asn
 1130 1135 1140
 Ser Lys Met Ser Lys Ile Arg Thr His Asn Ser Glu Val Glu Glu
 1145 1150 1155

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Asp Asp Met Asp Lys His Gln Gln Lys Ala Arg Phe Ala Lys Gln
1160 1165 1170

Pro Ala Tyr Thr Leu Val Asp Arg Glu Glu Lys Pro Pro Asn Gly
1175 1180 1185

Thr Pro Thr Lys His Pro Asn Trp Thr Asn Lys Gln Asp Asn Arg
1190 1195 1200

Asp Leu Glu Ser Ala Gln Ser Leu Asn Arg Met Glu Tyr Ile Val
1205 1210 1215

<210> 4

<211> 1238

<212> PRT

<213> Homo sapiens

<400> 4

Met Arg Ala Gln Gly Arg Gly Arg Leu Pro Arg Arg Leu Leu Leu Leu
1 5 10 15

Leu Ala Leu Trp Val Gln Ala Ala Arg Pro Met Gly Tyr Phe Glu Leu
20 25 30

Gln Leu Ser Ala Leu Arg Asn Val Asn Gly Glu Leu Leu Ser Gly Ala
35 40 45

Cys Cys Asp Gly Asp Gly Arg Thr Thr Arg Ala Gly Gly Cys Gly His
50 55 60

Asp Glu Cys Asp Thr Tyr Val Arg Val Cys Leu Lys Glu Tyr Gln Ala
65 70 75 80

Lys Val Thr Pro Thr Gly Pro Cys Ser Tyr Gly His Gly Ala Thr Pro
85 90 95

Val Leu Gly Gly Asn Ser Phe Tyr Leu Pro Pro Ala Gly Ala Ala Gly
100 105 110

Asp Arg Ala Arg Ala Arg Ala Arg Ala Gly Gly Asp Gln Asp Pro Gly
115 120 125

Leu Val Val Ile Pro Phe Gln Phe Ala Trp Pro Arg Ser Phe Thr Leu
130 135 140

Ile Val Glu Ala Trp Asp Trp Asp Asn Asp Thr Thr Pro Asn Glu Glu
145 150 155 160

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Leu Leu Ile Glu Arg Val Ser His Ala Gly Met Ile Asn Pro Glu Asp
 165 170 175
 Arg Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu
 180 185 190
 Gln Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn
 195 200 205
 Lys Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp
 210 215 220
 Gln Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
 225 230 235 240
 Lys Glu Ala Val Cys Lys Gln Gly Cys Asn Leu Leu His Gly Gly Cys
 245 250 255
 Thr Val Pro Gly Glu Cys Arg Cys Ser Tyr Gly Trp Gln Gly Arg Phe
 260 265 270
 Cys Asp Glu Cys Val Pro Tyr Pro Gly Cys Val His Gly Ser Cys Val
 275 280 285
 Glu Pro Trp Gln Cys Asn Cys Glu Thr Asn Trp Gly Gly Leu Leu Cys
 290 295 300
 Asp Lys Asp Leu Asn Tyr Cys Gly Ser His His Pro Cys Thr Asn Gly
 305 310 315 320
 Gly Thr Cys Ile Asn Ala Glu Pro Asp Gln Tyr Arg Cys Thr Cys Pro
 325 330 335
 Asp Gly Tyr Ser Gly Arg Asn Cys Glu Lys Ala Glu His Ala Cys Thr
 340 345 350
 Ser Asn Pro Cys Ala Asn Gly Gly Ser Cys His Glu Val Pro Ser Gly
 355 360 365
 Phe Glu Cys His Cys Pro Ser Gly Trp Ser Gly Pro Thr Cys Ala Leu
 370 375 380
 Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys Ala Ala Gly Gly Thr Cys
 385 390 395 400
 Val Asp Gln Val Asp Gly Phe Glu Cys Ile Cys Pro Glu Gln Trp Val
 405 410 415
 Gly Ala Thr Cys Gln Leu Asp Ala Asn Glu Cys Glu Gly Lys Pro Cys
 420 425 430

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Leu Asn Ala Phe Ser Cys Lys Asn Leu Ile Gly Gly Tyr Tyr Cys Asp
 435 440 445
 Cys Ile Pro Gly Trp Lys Gly Ile Asn Cys His Ile Asn Val Asn Asp
 450 455 460
 Cys Arg Gly Gln Cys Gln His Gly Gly Thr Cys Lys Asp Leu Val Asn
 465 470 475 480
 Gly Tyr Gln Cys Val Cys Pro Arg Gly Phe Gly Gly Arg His Cys Glu
 485 490 495
 Leu Glu Arg Asp Lys Cys Ala Ser Ser Pro Cys His Ser Gly Gly Leu
 500 505 510
 Cys Glu Asp Leu Ala Asp Gly Phe His Cys His Cys Pro Gln Gly Phe
 515 520 525
 Ser Gly Pro Leu Cys Glu Val Asp Val Asp Leu Cys Glu Pro Ser Pro
 530 535 540
 Cys Arg Asn Gly Ala Arg Cys Tyr Asn Leu Glu Gly Asp Tyr Tyr Cys
 545 550 555 560
 Ala Cys Pro Asp Asp Phe Gly Gly Lys Asn Cys Ser Val Pro Arg Glu
 565 570 575
 Pro Cys Pro Gly Gly Ala Cys Arg Val Ile Asp Gly Cys Gly Ser Asp
 580 585 590
 Ala Gly Pro Gly Met Pro Gly Thr Ala Ala Ser Gly Val Cys Gly Pro
 595 600 605
 His Gly Arg Cys Val Ser Gln Pro Gly Gly Asn Phe Ser Cys Ile Cys
 610 615 620
 Asp Ser Gly Phe Thr Gly Thr Tyr Cys His Glu Asn Ile Asp Asp Cys
 625 630 635 640
 Leu Gly Gln Pro Cys Arg Asn Gly Gly Thr Cys Ile Asp Glu Val Asp
 645 650 655
 Ala Phe Arg Cys Phe Cys Pro Ser Gly Trp Glu Gly Glu Leu Cys Asp
 660 665 670
 Thr Asn Pro Asn Asp Cys Leu Pro Asp Pro Cys His Ser Arg Gly Arg
 675 680 685
 Cys Tyr Asp Leu Val Asn Asp Phe Tyr Cys Ala Cys Asp Asp Gly Trp
 690 695 700

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Lys Gly Lys Thr Cys His Ser Arg Glu Phe Gln Cys Asp Ala Tyr Thr
 705 710 715 720
 Cys Ser Asn Gly Gly Thr Cys Tyr Asp Ser Gly Asp Thr Phe Arg Cys
 725 730 735
 Ala Cys Pro Pro Gly Trp Lys Gly Ser Thr Cys Ala Val Ala Lys Asn
 740 745 750
 Ser Ser Cys Leu Pro Asn Pro Cys Val Asn Gly Gly Thr Cys Val Gly
 755 760 765
 Ser Gly Ala Ser Phe Ser Cys Ile Cys Arg Asp Gly Trp Glu Gly Arg
 770 775 780
 Thr Cys Thr His Asn Thr Asn Asp Cys Asn Pro Leu Pro Cys Tyr Asn
 785 790 795 800
 Gly Gly Ile Cys Val Asp Gly Val Asn Trp Phe Arg Cys Glu Cys Ala
 805 810 815
 Pro Gly Phe Ala Gly Pro Asp Cys Arg Ile Asn Ile Asp Glu Cys Gln
 820 825 830
 Ser Ser Pro Cys Ala Tyr Gly Ala Thr Cys Val Asp Glu Ile Asn Gly
 835 840 845
 Tyr Arg Cys Ser Cys Pro Pro Gly Arg Ala Gly Pro Arg Cys Gln Glu
 850 855 860
 Val Ile Gly Phe Gly Arg Ser Cys Trp Ser Arg Gly Thr Pro Phe Pro
 865 870 875 880
 His Gly Ser Ser Trp Val Glu Asp Cys Asn Ser Cys Arg Cys Leu Asp
 885 890 895
 Gly Arg Arg Asp Cys Ser Lys Val Trp Cys Gly Trp Lys Pro Cys Leu
 900 905 910
 Leu Ala Gly Gln Pro Glu Ala Leu Ser Ala Gln Cys Pro Leu Gly Gln
 915 920 925
 Arg Cys Leu Glu Lys Ala Pro Gly Gln Cys Leu Arg Pro Pro Cys Glu
 930 935 940
 Ala Trp Gly Glu Cys Gly Ala Glu Glu Pro Pro Ser Thr Pro Cys Leu
 945 950 955 960
 Pro Arg Ser Gly His Leu Asp Asn Asn Cys Ala Arg Leu Thr Leu His
 965 970 975

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Phe Asn Arg Asp His Val Pro Gln Gly Thr Thr Val Gly Ala Ile Cys
 980 985 990

Ser Gly Ile Arg Ser Leu Pro Ala Thr Arg Ala Val Ala Arg Asp Arg
 995 1000 1005

Leu Leu Val Leu Leu Cys Asp Arg Ala Ser Ser Gly Ala Ser Ala
 1010 1015 1020

Val Glu Val Ala Val Ser Phe Ser Pro Ala Arg Asp Leu Pro Asp
 1025 1030 1035

Ser Ser Leu Ile Gln Gly Ala Ala His Ala Ile Val Ala Ala Ile
 1040 1045 1050

Thr Gln Arg Gly Asn Ser Ser Leu Leu Leu Ala Val Thr Glu Val
 1055 1060 1065

Lys Val Glu Thr Val Val Thr Gly Gly Ser Ser Thr Gly Leu Leu
 1070 1075 1080

Val Pro Val Leu Cys Gly Ala Phe Ser Val Leu Trp Leu Ala Cys
 1085 1090 1095

Val Val Leu Cys Val Trp Trp Thr Arg Lys Arg Arg Lys Glu Arg
 1100 1105 1110

Glu Arg Ser Arg Leu Pro Arg Glu Glu Ser Ala Asn Asn Gln Trp
 1115 1120 1125

Ala Pro Leu Asn Pro Ile Arg Asn Pro Ile Glu Arg Pro Gly Gly
 1130 1135 1140

His Lys Asp Val Leu Tyr Gln Cys Lys Asn Phe Thr Pro Pro Pro
 1145 1150 1155

Arg Arg Ala Asp Glu Ala Leu Pro Gly Pro Ala Gly His Ala Ala
 1160 1165 1170

Val Arg Glu Asp Glu Glu Asp Glu Asp Leu Gly Arg Gly Glu Glu
 1175 1180 1185

Asp Ser Leu Glu Ala Glu Lys Phe Leu Ser His Lys Phe Thr Lys
 1190 1195 1200

Asp Pro Gly Arg Ser Pro Gly Arg Pro Ala His Trp Ala Ser Gly
 1205 1210 1215

Pro Lys Val Asp Asn Arg Ala Val Arg Ser Ile Asn Glu Ala Arg
 1220 1225 1230

Tyr Val Gly Lys Glu
1235

<210> 5

<211> 257

<212> PRT

<213> Homo sapiens

<400> 5

Pro Leu Ala Glu Pro Leu Ala Pro Arg Asp Val Phe Ile Ala Val Lys
1 5 10 15

Thr Thr Lys Lys Phe His Arg Ala Arg Leu Asp Leu Leu Leu Glu Thr
20 25 30

Trp Ile Ser Arg His Lys Glu Met Thr Phe Ile Phe Thr Asp Gly Glu
35 40 45

Asp Glu Ala Leu Ala Arg His Thr Gly Asn Val Val Ile Thr Asn Cys
50 55 60

Ser Ala Ala His Ser Arg Gln Ala Leu Ser Cys Lys Met Ala Val Glu
65 70 75 80

Tyr Asp Arg Phe Ile Glu Ser Gly Arg Lys Trp Phe Cys His Val Asp
85 90 95

Asp Asp Asn Tyr Val Asn Leu Arg Ala Leu Leu Leu Leu Ala Ser
100 105 110

Tyr Pro His Thr Leu Asp Val Tyr Val Gly Lys Pro Ser Leu Asp Arg
115 120 125

Pro Ile Gln Ala Met Glu Arg Val Ser Glu Asn Lys Val Arg Pro Val
130 135 140

His Phe Trp Phe Ala Thr Gly Gly Ala Gly Phe Cys Ile Ser Arg Gly
145 150 155 160

Leu Ala Leu Lys Met Ser Pro Trp Ala Ser Gly Gly His Phe Met Asn
165 170 175

Thr Ala Glu Arg Ile Arg Leu Pro Asp Asp Cys Thr Ile Gly Tyr Ile
180 185 190

Val Glu Ala Leu Leu Gly Val Pro Leu Ile Arg Ser Gly Leu Phe His
195 200 205

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Ser His Leu Glu Asn Leu Gln Gln Val Pro Thr Ser Glu Leu His Glu
210 215 220

Gln Val Thr Leu Ser Tyr Gly Met Phe Glu Asn Lys Arg Asn Ala Val
225 230 235 240

His Val Lys Gly Pro Phe Ser Val Glu Ala Asp Pro Ser Arg Trp Gly
245 250 255

Asn

<210> 6

<211> 321

<212> PRT

<213> Homo sapiens

<400> 6

Met Gln Cys Arg Leu Pro Arg Gly Leu Ala Gly Ala Leu Leu Thr Leu
1 5 10 15

Leu Cys Met Gly Leu Leu Cys Leu Arg Tyr His Leu Asn Leu Ser Pro
20 25 30

Gln Arg Val Gln Gly Thr Pro Glu Leu Ser Gln Pro Asn Pro Gly Pro
35 40 45

Pro Lys Leu Gln Leu His Asp Val Phe Ile Ala Val Lys Thr Thr Arg
50 55 60

Ala Phe His Arg Leu Arg Leu Glu Leu Leu Leu Asp Thr Trp Val Ser
65 70 75 80

Arg Thr Arg Glu Leu Thr Phe Val Phe Thr Asp Ser Pro Asp Lys Gly
85 90 95

Leu Gln Glu Arg Leu Gly Ser His Leu Val Val Thr Asn Cys Ser Ala
100 105 110

Glu His Ser His Pro Ala Leu Ser Cys Lys Met Ala Ala Glu Phe Asp
115 120 125

Thr Phe Leu Ala Ser Gly Leu Arg Trp Phe Cys His Val Asp Asp Asp
130 135 140

Asn Tyr Val Asn Pro Arg Ala Leu Leu Gln Leu Leu Arg Ala Phe Pro
145 150 155 160

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Leu Ala Arg Asp Val Tyr Val Gly Arg Pro Ser Leu Asn Arg Pro Ile
165 170 175

His Ala Ser Glu Pro Gln Pro His Asn Arg Thr Arg Leu Val Gln Phe
180 185 190

Trp Phe Ala Thr Gly Gly Ala Gly Phe Cys Ile Asn Arg Lys Leu Ala
195 200 205

Leu Lys Met Ala Pro Trp Ala Ser Gly Ser Arg Phe Met Asp Thr Ser
210 215 220

Ala Leu Ile Arg Leu Pro Asp Asp Cys Thr Met Gly Tyr Ile Ile Glu
225 230 235 240

Cys Lys Leu Gly Gly Arg Leu Gln Pro Ser Pro Leu Phe His Ser His
245 250 255

Leu Glu Thr Leu Gln Leu Leu Arg Thr Ala Gln Leu Pro Glu Gln Val
260 265 270

Thr Leu Ser Tyr Gly Val Phe Glu Gly Lys Leu Asn Val Ile Lys Leu
275 280 285

Gln Gly Pro Phe Ser Pro Glu Glu Asp Pro Ser Arg Phe Arg Ser Leu
290 295 300

His Cys Leu Leu Tyr Pro Asp Thr Pro Trp Cys Pro Gln Leu Gly Ala
305 310 315 320

Arg

<210> 7

<211> 191

<212> PRT

<213> Homo sapiens

<400> 7

Met Ser Arg Ala Arg Gly Ala Leu Cys Arg Ala Cys Leu Ala Leu Ala
1 5 10 15

Ala Ala Leu Ala Ala Leu Leu Leu Leu Pro Leu Pro Leu Pro Arg Ala
20 25 30

Pro Ala Pro Ala Arg Thr Pro Ala Pro Ala Pro Arg Ala Pro Pro Ser
35 40 45

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Arg Pro Ala Ala Pro Ser Leu Arg Pro Asp Asp Val Phe Ile Ala Val
50 55 60

Lys Thr Thr Arg Lys Asn His Gly Pro Arg Leu Arg Leu Leu Arg
65 70 75 80

Thr Trp Ile Ser Arg Ala Arg Gln Gln Thr Phe Ile Phe Thr Asp Gly
85 90 95

Asp Asp Pro Glu Leu Glu Leu Gln Gly Gly Asp Arg Val Ile Asn Thr
100 105 110

Asn Cys Ser Ala Val Arg Thr Arg Gln Ala Leu Cys Cys Lys Met Ser
115 120 125

Val Glu Tyr Asp Lys Phe Ile Glu Ser Gly Arg Lys Trp Phe Cys His
130 135 140

Val Asp Asp Asp Asn Tyr Val Asn Ala Arg Ser Leu Leu His Leu Leu
145 150 155 160

Ser Ser Phe Ser Pro Ser Gln Asp Val Tyr Leu Gly Arg Pro Ser Leu
165 170 175

Asp His Pro Ile Glu Ala Thr Glu Arg Val Gln Gly Gly Arg Thr
180 185 190

<210> 8

<211> 1404

<212> PRT

<213> Drosophila melanogaster

<400> 8

Met Phe Arg Lys His Phe Arg Arg Lys Pro Ala Thr Ser Ser Ser Leu
1 5 10 15

Glu Ser Thr Ile Glu Ser Ala Asp Ser Leu Gly Met Ser Lys Lys Thr
20 25 30

Ala Thr Lys Arg Gln Arg Pro Arg His Arg Val Pro Lys Ile Ala Thr
35 40 45

Leu Pro Ser Thr Ile Arg Asp Cys Arg Ser Leu Lys Ser Ala Cys Asn
50 55 60

Leu Ile Ala Leu Ile Leu Ile Leu Leu Val His Lys Ile Ser Ala Ala
65 70 75 80

Gly	Asn	Phe	Glu	Leu	Glu	Ile	Leu	Glu	Ile	Ser	Asn	Thr	Asn	Ser	His
Leu	Leu	Asn	Gly	Tyr	Cys	Cys	Gly	Met	Pro	Ala	Glu	Leu	Arg	Ala	Thr
Lys	Thr	Ile	Gly	Cys	Ser	Pro	Cys	Thr	Thr	Ala	Phe	Arg	Leu	Cys	Leu
Lys	Glu	Tyr	Gln	Thr	Thr	Glu	Gln	Gly	Ala	Ser	Ile	Ser	Thr	Gly	Cys
Ser	Phe	Gly	Asn	Ala	Thr	Thr	Lys	Ile	Leu	Gly	Gly	Ser	Ser	Phe	Val
Leu	Ser	Asp	Pro	Gly	Val	Gly	Ala	Ile	Val	Leu	Pro	Phe	Thr	Phe	Arg
Trp	Thr	Lys	Ser	Phe	Thr	Leu	Ile	Leu	Gln	Ala	Leu	Asp	Met	Tyr	Asn
Thr	Ser	Tyr	Pro	Asp	Ala	Glu	Arg	Leu	Ile	Glu	Glu	Thr	Ser	Tyr	Ser
Gly	Val	Ile	Leu	Pro	Ser	Pro	Glu	Trp	Lys	Thr	Leu	Asp	His	Ile	Gly
Arg	Asn	Ala	Arg	Ile	Thr	Tyr	Arg	Val	Arg	Val	Gln	Cys	Ala	Val	Thr
Tyr	Tyr	Asn	Thr	Thr	Cys	Thr	Thr	Phe	Cys	Arg	Pro	Arg	Asp	Asp	Gln
Phe	Gly	His	Tyr	Ala	Cys	Gly	Ser	Glu	Gly	Gln	Lys	Leu	Cys	Leu	Asn
Gly	Trp	Gln	Gly	Val	Asn	Cys	Glu	Glu	Ala	Ile	Cys	Lys	Ala	Gly	Cys
Asp	Pro	Val	His	Gly	Lys	Cys	Asp	Arg	Pro	Gly	Glu	Cys	Glu	Cys	Arg
Pro	Gly	Trp	Arg	Gly	Pro	Leu	Cys	Asn	Glu	Cys	Met	Val	Tyr	Pro	Gly
Cys	Lys	His	Gly	Ser	Cys	Asn	Gly	Ser	Ala	Trp	Lys	Cys	Val	Cys	Asp
Thr	Asn	Trp	Gly	Gly	Ile	Leu	Cys	Asp	Gln	Asp	Leu	Asn	Phe	Cys	Gly

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Thr His Glu Pro Cys Lys His Gly Gly Thr Cys Glu Asn Thr Ala Pro
355 360 365

Asp Lys Tyr Arg Cys Thr Cys Ala Glu Gly Leu Ser Gly Glu Gln Cys
370 375 380

Glu Ile Val Glu His Pro Cys Ala Thr Arg Pro Cys Arg Asn Gly Gly
385 390 395 400

Thr Cys Thr Leu Lys Thr Ser Asn Arg Thr Gln Ala Gln Val Tyr Arg
405 410 415

Thr Ser His Gly Arg Ser Asn Met Gly Arg Pro Val Arg Arg Ser Ser
420 425 430

Ser Met Arg Ser Leu Asp His Leu Arg Pro Glu Gly Gln Ala Leu Asn
435 440 445

Gly Ser Ser Ser Ser Gly Leu Val Ser Leu Gly Ser Leu Gln Leu Gln
450 455 460

Gln Gln Leu Ala Pro Asp Phe Thr Cys Asp Cys Ala Ala Gly Trp Thr
465 470 475 480

Gly Pro Thr Cys Glu Ile Asn Ile Asp Glu Cys Ala Gly Gly Pro Cys
485 490 495

Glu His Gly Gly Thr Cys Ile Asp Leu Ile Gly Gly Phe Arg Cys Glu
500 505 510

Cys Pro Pro Glu Trp His Gly Asp Val Cys Gln Val Asp Val Asn Glu
515 520 525

Cys Glu Ala Pro His Ser Ala Gly Ile Ala Ala Asn Ala Leu Leu Thr
530 535 540

Thr Thr Ala Thr Ala Ile Ile Gly Ser Asn Leu Ser Ser Thr Ala Leu
545 550 555 560

Leu Ala Ala Leu Thr Ser Ala Val Ala Ser Thr Ser Leu Ala Ile Gly
565 570 575

Pro Cys Ile Asn Ala Lys Glu Cys Arg Asn Gln Pro Gly Ser Phe Ala
580 585 590

Cys Ile Cys Lys Glu Gly Trp Gly Gly Val Thr Cys Ala Glu Asn Leu
595 600 605

Asp Asp Cys Val Gly Gln Cys Arg Asn Gly Ala Thr Cys Ile Asp Leu
610 615 620

212583.ST25

Val Asn Asp Tyr Arg Cys Ala Cys Ala Ser Gly Phe Thr Gly Arg Asp
 625 630 635 640
 Cys Glu Thr Asp Ile Asp Glu Cys Ala Thr Ser Pro Cys Arg Asn Gly
 645 650 655
 Gly Glu Cys Val Asp Met Val Gly Lys Phe Asn Cys Ile Cys Pro Leu
 660 665 670
 Gly Tyr Ser Gly Ser Leu Cys Glu Glu Ala Lys Glu Asn Cys Thr Pro
 675 680 685
 Ser Pro Cys Leu Glu Gly His Cys Leu Asn Thr Pro Glu Gly Tyr Tyr
 690 695 700
 Cys His Cys Pro Pro Asp Arg Ala Gly Lys His Cys Glu Gln Leu Arg
 705 710 715 720
 Pro Leu Cys Ser Gln Pro Pro Cys Asn Glu Gly Cys Phe Ala Asn Val
 725 730 735
 Ser Leu Ala Thr Ser Ala Thr Thr Thr Thr Thr Thr Thr Thr Ala
 740 745 750
 Thr Thr Thr Arg Lys Met Ala Lys Pro Ser Gly Leu Pro Cys Ser Gly
 755 760 765
 His Gly Ser Cys Glu Met Ser Asp Val Gly Thr Phe Cys Lys Cys His
 770 775 780
 Val Gly His Thr Gly Thr Phe Cys Glu His Asn Leu Asn Glu Cys Ser
 785 790 795 800
 Pro Asn Pro Cys Arg Asn Gly Gly Ile Cys Leu Asp Gly Asp Gly Asp
 805 810 815
 Phe Thr Cys Glu Cys Met Ser Gly Trp Thr Gly Lys Arg Cys Ser Glu
 820 825 830
 Arg Ala Thr Gly Cys Tyr Ala Gly Gln Cys Gln Asn Gly Gly Thr Cys
 835 840 845
 Met Pro Gly Ala Pro Asp Lys Ala Leu Gln Pro His Cys Arg Cys Ala
 850 855 860
 Pro Gly Trp Thr Gly Leu Phe Cys Ala Glu Ala Ile Asp Gln Cys Arg
 865 870 875 880
 Gly Gln Pro Cys His Asn Gly Gly Thr Cys Glu Ser Gly Ala Gly Trp
 885 890 895

[illegible]

Gly Thr Asn Asp Thr Val Glu Leu Thr Val Ser Ser Ser Lys Leu
1145 1150 1155

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Asn Asp Pro Gln Leu Pro Val Ala Val Gly Leu Leu Gly Glu Leu
 1160 1165 1170
 Leu Ser Ser Arg Gln Leu Asn Gly Ile Gln Arg Arg Lys Glu Leu
 1175 1180 1185
 Glu Leu Gln His Ala Lys Leu Ala Ala Leu Thr Ser Ile Val Glu
 1190 1195 1200
 Val Lys Leu Glu Thr Ala Arg Val Ala Asp Gly Ser Gly His Ser
 1205 1210 1215
 Leu Leu Ile Gly Val Leu Cys Gly Val Phe Ile Val Leu Val Gly
 1220 1225 1230
 Phe Ser Val Phe Ile Ser Leu Tyr Trp Lys Gln Arg Leu Ala Tyr
 1235 1240 1245
 Arg Thr Ser Ser Gly Met Asn Leu Thr Pro Ser Leu Asp Ala Leu
 1250 1255 1260
 Arg His Glu Glu Glu Lys Ser Asn Asn Leu Gln Asn Glu Glu Asn
 1265 1270 1275
 Leu Arg Arg Tyr Thr Asn Pro Leu Lys Gly Ser Thr Ser Ser Leu
 1280 1285 1290
 Arg Ala Ala Thr Gly Met Glu Leu Ser Leu Asn Pro Ala Pro Glu
 1295 1300 1305
 Leu Ala Ala Ser Ala Ala Ser Ser Ser Ala Leu His Arg Ser Gln
 1310 1315 1320
 Pro Leu Phe Pro Pro Cys Asp Phe Glu Arg Glu Leu Asp Ser Ser
 1325 1330 1335
 Thr Gly Leu Lys Gln Ala His Lys Arg Ser Ser Gln Ile Leu Leu
 1340 1345 1350
 His Lys Thr Gln Asn Ser Asp Met Arg Lys Asn Thr Val Gly Ser
 1355 1360 1365
 Leu Asp Ser Pro Arg Lys Asp Phe Gly Lys Arg Ser Ile Asn Cys
 1370 1375 1380
 Lys Ser Met Pro Pro Ser Ser Gly Asp Glu Gly Ser Asp Val Leu
 1385 1390 1395
 Ala Thr Thr Val Met Val
 1400

<210> 9
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> JAG-1b Notch ligand
 <220>
 <221> misc_feature
 <223> JAG-1c Notch ligand

<400> 9
 Ala Asp Asp Tyr Tyr Tyr Gly Phe Gly Ala Asn Lys Phe Gly Arg Pro
 1 5 10 15

Arg

<210> 10
 <211> 21
 <212> PRT
 <213> artificial/unknown

<220>
 <221> misc_feature
 <223> JAG-1c Notch ligand

<400> 10
 Ala Asp Asp Tyr Tyr Tyr Gly Phe Gly Ala Asn Lys Phe Gly Arg Pro
 1 5 10 15

Arg Asp Asp Phe Phe
 20

<210> 11
 <211> 17
 <212> PRT
 <213> artificial/unknown

<220>

<221> misc_feature

<223> JAG-1 Notch ligand

<400> 11

Cys Asp Asp Tyr Tyr Tyr Gly Phe Gly Cys Asn Lys Phe Cys Arg Pro
 1 5 10 15

Arg

<210> 12

<211> 19

<212> PRT

<213> artificial/unknown

<220>

<221> misc_feature

<223> r-JAG1 Notch ligand

<400> 12

Cys Asp Asp Tyr Tyr Tyr Gly Phe Gly Cys Asn Lys Phe Gly Arg Pro
 1 5 10 15

Arg Asp Asp

<210> 13

<211> 17

<212> PRT

<213> artificial/unknown

<220>

<221> misc_feature

<223> Scrambled JAG peptide

<400> 13

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Arg Cys Gly Pro Asp Cys Phe Asp Asn Tyr Gly Arg Tyr Lys Tyr Cys
 1 5 10 15

Phe

<210> 14

<211> 22

<212> DNA

<213> artificial/unknown

<220>

<221> misc_feature

<223> NF kappa B oligonucleotide

<400> 14
 agttgagggg actttcccag gc

22

<210> 15

<211> 282

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<223> Human Notch repeats 11-12 - a Notch antagnoist polypeptide

<220>

<221> exon

<222> (1)..(282)

<223>

<220>

<221> misc_feature

<222> (1)..(33)

<223> encodes a tag that is dispensible for Notch antagnoistic activity

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<400> 15
 atg gct gca gaa ttc cat cat cat cat cat cat cag gac gtg gat gag 48
 Met Ala Ala Glu Phe His His His His His His Gln Asp Val Asp Glu
 1 5 10 15
 tgc tcg ctg ggt gcc aac ccc tgc gag cat gcg ggc aag tgc atc aac 96
 Cys Ser Leu Gly Ala Asn Pro Cys Glu His Ala Gly Lys Cys Ile Asn
 20 25 30
 acg ctg ggc tcc ttc gag tgc cag tgt ctg cag ggc tac acg ggc ccc 144
 Thr Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln Gly Tyr Thr Gly Pro
 35 40 45
 cga tgc gag atc gac gtc aac gag tgc gtc tcg aac ccg tgc cag aac 192
 Arg Cys Glu Ile Asp Val Asn Glu Cys Val Ser Asn Pro Cys Gln Asn
 50 55 60
 gac gcc acc tgc ctg gac cag att ggg gag ttc cag tgc atg tgc atg 240
 Asp Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe Gln Cys Met Cys Met
 65 70 75 80
 ccc ggc tac gag ggt gtg cac tgc gag gtc aac aca tga tga 282
 Pro Gly Tyr Glu Gly Val His Cys Glu Val Asn Thr
 85 90
 <210> 16
 <211> 92
 <212> PRT
 <213> Artificial/Unknown
 <220>
 <221> Misc
 <222> (1)..(92)
 <223> Notch antagonist polypeptide containing tag sequence
 <220>
 <221> Misc
 <222> (1)..(11)
 <223> tag sequence for detecting polypeptide
 <220>
 <221> Misc
 <222> (12)..(92)
 <223> human Notch repeats 11 and 12
 <400> 16

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Met Ala Ala Glu Phe His His His His His His Gln Asp Val Asp Glu
 1 5 10
 Cys Ser Leu Gly Ala Asn Pro Cys Glu His Ala Gly Lys Cys Ile Asn
 20 25 30
 Thr Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln Gly Tyr Thr Gly Pro
 35 40 45
 Arg Cys Glu Ile Asp Val Asn Glu Cys Val Ser Asn Pro Cys Gln Asn
 50 55 60
 Asp Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe Gln Cys Met Cys Met
 65 70 75 80
 Pro Gly Tyr Glu Gly Val His Cys Glu Val Asn Thr
 85 90

<210> 17
 <211> 249
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> exon
 <222> (1)..(249)
 <223> Encodes human Notch repeats 11-12

<400> 17
 cag gac gtg gat gag tgc tcg ctg ggt gcc aac ccc tgc gag cat gcg 48
 Gln Asp Val Asp Glu Cys Ser Leu Gly Ala Asn Pro Cys Glu His Ala
 1 5 10
 ggc aag tgc atc aac acg ctg ggc tcc ttc gag tgc cag tgt ctg cag 96
 Gly Lys Cys Ile Asn Thr Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln
 20 25 30
 ggc tac acg ggc ccc cga tgc gag atc gac gtc aac gag tgc gtc tcg 144
 Gly Tyr Thr 35 Gly Pro Arg Cys Glu Ile Asp Val Asn Glu Cys Val Ser
 40 45
 aac ccg tgc cag aac gac gcc acc tgc ctg gac cag att ggg gag ttc 192
 Asn Pro Cys Gln Asn Asp Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe
 50 55 60
 cag tgc atg tgc atg ccc gcc tac gag ggt gtg cac tgc gag gtc aac 240
 Gln Cys Met Cys Met Pro Gly Tyr Glu Gly Val His Cys Glu Val Asn
 65 70 75 80
 aca tga tga 249
 Thr

<210> 18

<211> 81

<212> PRT

<213> Artificial/Unknown

<220>

<221> misc

<222> (1)..(81)

<223> Human Notch repeats 11 and 12 - functions as Notch antagonist

<400> 18

Gln Asp Val Asp Glu Cys Ser Leu Gly Ala Asn Pro Cys Glu His Ala
 1 5 10 15

Gly Lys Cys Ile Asn Thr Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln
 20 25 30

Gly Tyr Thr Gly Pro Arg Cys Glu Ile Asp Val Asn Glu Cys Val Ser
 35 40 45

Asn Pro Cys Gln Asn Asp Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe
 50 55 60

Gln Cys Met Cys Met Pro Gly Tyr Glu Gly Val His Cys Glu Val Asn
 65 70 75 80

Thr